



## **C-Peptide Determinations**

### **1.0 Purpose**

The purpose of this document is to define the process and procedures for C-Peptide measurement as they are performed for the JDRF nPOD project.

### **2.0 Application/Scope**

This procedure shall be applied to all C-Peptide measurements conducted for the JDRF nPOD project.

### **3.0 Definitions**

C-Peptide is a single chain of 31 amino acids that connects the A and B chains of insulin in the proinsulin molecule. In clinical practice, measurement of C-Peptide helps health care professionals assess the residual beta-cell function in patients treated with insulin and distinguish between type 1 and type 2 diabetes.

### **4.0 Associated SOPs**

#### **5.1 Shipping and Handling**

### **5.0 Responsibilities**

5.1 The nPOD laboratory manager will prepare the shipment of samples for C-Peptide measurement based on the protocol below.

5.2 The nPOD lab manager will enter the data into the nPOD database once it is received from the University of Washington laboratory.

### **6.0 Procedure**

8.1 To perform analysis of C-Peptide, samples should optimally be processed within two hours from blood draw and kept frozen at -70, without undergoing freezing-thawing cycles.

8.2 A volume of 300 ul is desirable, but 200 ul is the minimum required. If samples are stored at higher volume, the University of Washington laboratory will immediately re-freeze the samples after completing the analysis and ship them back to the Organ Procurement and Pathology Core.

8.3 Samples should be shipped on dry ice by overnight FedEx using the nPOD account.

- 8.4 Prior to the shipment, the nPOD laboratory manager will send an electronic manifest of the samples in the same order the samples are organized in REVCO boxes. Additional information to include:

Study name: JDRF nPOD

PI Name: Mark Atkinson, PhD

Please send results to: Mark Atkinson ([Atkinson@ufl.edu](mailto:Atkinson@ufl.edu))

Npod ([npod@pathology.ufl.edu](mailto:npod@pathology.ufl.edu))

Format of reports: Excel file

- 8.5 On the day of shipment, the nPOD lab manager will send the FEDEX tracking information to Jessica J. Chmielewski, University of Washington's program coordinator, at [jjc8@u.washington.edu](mailto:jjc8@u.washington.edu)

- 8.4 The address for shipment is:

Santica M. Marcovina, PhD, ScD

Research Professor of Medicine

Director, Northwest Lipid Metabolism and Diabetes Research Laboratories

Attn: Jessica Chmielewski, Program Coordinator

Northwest Lipid Metabolism and Diabetes Research Laboratories

University of Washington

401 Queen Anne Avenue North

Seattle, WA 98109

Phone: (206) 685 3331

FAX: (206) 685 3279

- 8.5 Invoice(s) will be sent to Kimberly Young, University of Florida.

<b>JDRF nPOD Standard Operating Procedures</b>	
SOP #: nPOD5	Title: C-Peptide Determinations
Original Effective Date: 8/1/08	
Current Version Effective Date: 8/1/08	Page 2